My At-Home Tap Water Observations

Ask your parent or guardian to join you for an investigation of your home's tap water quality. What does pH tell you? It is a measure of the acidity or alkalinity of your water. Low or high pH can mean your water is corrosive and can leach metals from your pipes into your water. It can also lead to damage to your pipes! Data can be shared in the "pH in Sipayik" project on the citizen science data portal, anecdata.org.

INSTRUCTIONS:

- 1. Take water samples from 4 locations at home. Fill a cup or glass with water from your:
 - a. kitchen faucet b. bathroom faucet c. bathtub or shower d. outside faucet or hose
 Note: If there is another location you are curious about, feel free to replace one of the locations above with your alternative location.
- 2. Immerse all of the testing parts of the test strip into the kitchen faucet water for 1 second and take it out.
- 3. Shake the excess water off. Compare against the color chart and read immediately. The closest matching set of colors indicates the solution's pH level. If the color is between two scales, the pH is between the two values for those scales. Write down the pH on your data entry sheet.
- 4. Next, observe the odor of the kitchen faucet sample. Does it have a smell? Circle yes or no in the relevant column on the data entry sheet (next page).
- Now observe if there are any staining or deposits, such as a chalky white residue, around the faucet. Circle yes or no in the relevant column. If yes, then describe the appearance of the deposits/staining in a few words.
- 6. Next, comment on whether the water has a taste by circling yes or no. If yes, write a descriptive word or two in the relevant column. If you have never tasted the water, ask a family member if they have and what they remember the taste to be like. If no one in your family has ever tasted the water or does not remember the taste and does not want to taste it, circle unknown.
- 7. Now observe the color of the kitchen faucet sample by comparing it to the color gradient below. On the data entry sheet, record the number of the color that the water sample most closely matches. If your water is a different color other than yellow, indicate that on the datasheet and choose the shade (darkest is a 1, lightest is a 10).



8. Repeat steps 2-8 for all your water samples, ensuring you complete the table on the data entry sheet.

Data Entry Sheet

My At-Home Tap Water Observations

 Date pH Measured_____
 Student Name _____

School Name _____

Physical Address of tap water tested (street, town, state, zip)

Sample	pН	Odor		Deposits/ Staining		Taste	Color
							1-10
Kitchen Faucet		Yes	No	Yes	No	Yes No Unknown	Color:
		Describe:		Describe:		Describe:	
							Number:
Bathroom Faucet		Yes	No	Yes	No	Yes No Unknown	Color:
		Describe:		Describe:		Describe:	
							Number:
Bathtub / Shower		Yes	No	Yes	No	Yes No Unknown	Color:
		Describe:		Describe:		Describe:	
							Number:
Outside Faucet		Yes	No	Yes	No	Yes No Unknown	Color:
		Describe:		Describe:		Describe:	
							Number:
		1					

Testing pH



Getting started: Label water containers and fill them from the tap. Label pH strips to match.

Testing pH: Dip the first strip for one second, shake off excess water and compare it with the chart immediately.



Testing pH: Dip the next strip for one second, shake off excess water and compare it with the chart immediately.



Comparing the strip to the chart: Look at all four pads at once.